

## Fatal Work Injury Rates in Missouri: 2007 and 2008

The U.S. Department of Labor, Bureau of Labor Statistics (BLS) in conjunction with state agencies administers the Census of Fatal Occupational Injuries (CFOI) program to produce counts of fatal workplace injuries that occur within a given year. As part of this program, the BLS also calculates national and state level fatal work injury rates. Fatal work injury rates depict the risk of being fatally injured at work. These rates are available for all workers and for groups of workers, such as those in a certain industry.

The fatal work injury rate represents the number of fatal occupational injuries per 100,000 full-time equivalent workers. The methodology used to calculate this rate is described in the section below.

### **Census of Fatal Occupational Injuries - Missouri Fatal Work Injury Rates: 2007 and 2008**

*(Source: U.S. Department of Labor, Bureau of Labor Statistics)*

	<i>2007</i>	<i>2008</i>
<b>Overall Rate</b>	5.7	5.4
<b>Industry*</b>		
Agriculture, forestry, fishing and hunting	60.1	42.6
Mining	---	---
Construction	14.5	11.8
Manufacturing	1.7	2.5
Transportation and utilities	15.5	13.9
Information	---	---
Wholesale and retail trade	4.6	4.3
Financial activities	---	---
Professional and business services	5.0	3.5
Educational and health services	0.9	1.8
Leisure and hospitality	5.1	3.1
Other services, except public administration	6.9	7.3
Public administration	6.6	11.7

Note: Dashes indicate that the BLS did not calculate the fatality rate because the data did not meet publication criteria or there were no data reported.

\*Industry is classified according to the North American Industry Classification System (NAICS).

The overall fatal work injury rate in Missouri declined slightly from 2007 to 2008. The agriculture, forestry, fishing and hunting industry had the highest such rate among Missouri industries, although there was a 29-percent decline in this rate from 2007 to 2008. The transportation and utilities industry and the construction industry had the second and third highest fatal work injury rates respectively for both 2007 and 2008. The educational and health services industry had the lowest fatal work injury rate for both years, even though it doubled in 2008.

The fatal work injury rate declined in these industries from 2007 to 2008: agriculture, forestry, fishing and hunting; construction; transportation and utilities; wholesale and retail trade; professional and business services; and leisure and hospitality. Conversely, the fatal work injury rate increased from 2007 to 2008 for these industries: manufacturing; educational and health services; other services, except public administration; and public administration.

### **Methodology for Calculating Fatal Work Injury Rates**

In the past, fatal work injury rates were employment-based using employment estimates from the U.S. Census Bureau's Current Population Survey (CPS). Beginning in 2007, the CFOI adopted

hours worked estimates from the CPS as the denominator of state fatal injury rates to measure fatal injury risk per standardized length of exposure. This is generally considered to be more accurate than employment-based rates. Hours-based rates use the average number of employees at work and the average hours each employee works per year.

Although “at work” and “average hours” data are available at the national level, they are not available at the state level. State fatal injury rates by industry can be imputed by using national-level information to calculate the average number of hours for each employee. The rate was calculated as:  $(N/EH) \times 200,000,000$  where:

*$N$  = number of fatal work injuries*

*$EH$  = total hours worked by all employees during the calendar year*

*200,000,000 = base for 100,000 equivalent full-time workers (working 40 hours per week, 50 weeks per year)*

The imputation to calculate EH (total hours worked by all employees during the calendar year) for the state was calculated as:  $EHS = HW_N \times Es$  where:

*$Es$  = state employment*

*$HW_N$  = average annual number of hours for each employee at the national level.*